



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/589,302

08/11/2006

Takashi Kanai

F-9147

6061

28107 7590 12/09/2008
JORDAN AND HAMBURG LLP
122 EAST 42ND STREET
SUITE 4000
NEW YORK, NY 10168

EXAMINER

KUTZLER, PATRICK M

ART UNIT

PAPER NUMBER

4137

MAIL DATE

DELIVERY MODE

12/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,302	Applicant(s) KANAI ET AL.	
	Examiner PATRICK KUTZLER	Art Unit 4137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 11B, pg. 6, line 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

Art Unit: 4137

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the phrase “the ring blade support plates are put in a part which can cast the impeller with upper and lower plates without sliding core” is not explained sufficiently to allow one of ordinary skill in the art to make the invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, it is unclear what is meant by “provided a part of the upper surface between the lower plates” in lines 3-4.

Therefore, the claim will be considered as best understood.

Claim 3 recites the limitation “can cast” in line 2. The claim is not understood with respect to this limitation.

Claim 3 recites the limitation “sliding core” in line 2. There is insufficient antecedent basis for this limitation in the claim.

In view of its improper dependency and it not being understood, claim 3 has not been further treated on the merits.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,236,129 to Yamashita (Yamashita) in view of US Patent No. 7,435,051 to Obinelo et al. (Obinelo).

In Reference to Claim 1

Yamashita discloses an air blower comprising: a case body (frame 1) having an air suction mouth (bell-mouth 19) and an outlet (openings 30) formed at a peripheral wall thereof; a motor which is installed into the case body, having a fluid dynamic bearing (radial bearing 17); and an impeller (rotating fan 8) which is fixed to a rotation member of the motor, which is formed in the shape of a ring, capable of suctioning air from the air suction mouth by rotating and discharging from the outlet (Fig. 1-3, col. 4, lines 9-19, col. 5, lines 8-30) but fails to disclose having a plurality of blade support plates provided at an upper and lower surfaces thereof, equalizing the difference in pressure between the upper and lower surfaces thereof. However, Obinelo teaches

Art Unit: 4137

having a plurality of blade support plates (support plate 105 and inlet rings 125, 130, 135) provided at an upper and lower surfaces thereof, equalizing the difference in pressure between the upper and lower surfaces thereof in order to support the blades of the rotating fan (Fig. 1, col. 2, lines 24-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added blade support plates to the upper and lower surfaces of an impeller as taught by Obinelo to the air blower disclosed by Yamashita in order to support the impeller blades.

In Reference to Claim 2

Yamashita as modified by Obinelo disclose the air blower according to claim 1 (see rejection of claim 1 above), wherein the ring blade support plates (support plate 105 and inlet rings 125, 130, 135) include lower blade support plates (inlet rings 125, 130, 135) provided at parts adjacent inside and outside at a lower surface of the impeller (blower 100) and an upper blade support plate (support plate 105) provided at an upper surface thereof, provided a part of the upper surface between the lower plates in order to support the blades of the rotating fan (Obinelo, Fig. 1, col. 2, lines 24-33).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,328,332 to Chiang discloses a wheel fan including blades, a top plate, a bottom ring, and convex rings set at the side and top of the blades.

Art Unit: 4137

US Patent No. 6,146,094 to Obana discloses a motor-driven blower and method of manufacturing an impeller for the motor-driven blower.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK KUTZLER whose telephone number is (571)270-7415. The examiner can normally be reached on Monday-Friday, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENNETH BOMBERG can be reached on (571)272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PK

/Kenneth Bomberg/
Supervisory Patent Examiner, Art Unit 4137